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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,932	04/26/2004	Antonio Gutierrez	2000L003	9889

7590 06/12/2007  
Infineum USA L.P.  
Law Department  
1900 East Linden Avenue  
P.O. Box 710  
Linden, NJ 07036-0710

EXAMINER
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GOLOBOY, JAMES C

ART UNIT	PAPER NUMBER
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1714

MAIL DATE	DELIVERY MODE
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06/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/712,932	GUTIERREZ ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	James Goloboy	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-13 is/are allowed.
- 6) ☒ Claim(s) 14-17 and 19-23 is/are rejected.
- 7) ☐ Claim(s) 18 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. All outstanding rejections have been overcome by applicant's amendments of 3/29/07. New grounds of rejection necessitated by the amendments are set forth below.

#### ***Claim Rejections - 35 USC § 103***

2. Claims 14-17 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lutwack (U.S. Pat. No. 3,206,467) in view of Papay.

From column 1 line 26 through column 2 line 4, Lutwack discloses a lubricant additive meeting the limitations of claims 14 and 20. Attention is particularly drawn to structure II in column 1, where the mononuclear heterocyclic moiety Ar is S-triazine, the linking moiety L is either an amino linkage or a sulfur linkage depending on the identity of Y, and the terminal moieties T can be several of the groups recited in claim 14 (see column 1 lines 44-50). The triazines of Lutwack are all substituted, meeting the limitations of claims 16 and 22, and R1 and R2 meet the limitations of claims 17 and 23 as the Q group of Lutwack preferably comprises 6 to 12 carbon atoms and the R group of Lutwack comprises 2 to 20 carbon atoms, both falling within the range recited in claims 17 and 2. The ratio of aliphatic to aromatic carbon atoms in the additive can encompass the ranges recited in claims 15 and 21, as n in structure I of column 1 can be greater than 1.

Lutwack does not disclose a high molecular weight dispersant.

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Papay discloses a lubricant composition comprising a dispersant-viscosity improver (column 46 lines 44-50), and a dispersant (columns 13-37). In column 28 lines 25-31 (Example B-4), Papay discloses a dispersant made from polyisobutylene with a molecular weight of 1,710, falling within the defined by applicant on page 7 lines 24-27 of the specification as forming a high molecular weight dispersant. The dispersant has a nitrogen content of 1.1%. In the first table in column 50, Papay discloses that the most preferred concentration for the dispersant (component b) in a lubricating composition is from 1 to 8%. The nitrogen content of the composition is therefore from 0.011 to 0.088%, within the range recited in Claim 19.

Claims 14-17 and 19-23 are therefore rendered obvious by the use of the high molecular weight dispersant of Papay in the oligomer-containing lubricant composition of Nnadi.

### ***Allowable Subject Matter***

3. Claims 1-13 are allowed. The claims have been amended to require that the Ar group be a polynuclear heterocyclic moiety, while the rejections set forth above, and in the office action mailed 12/19/06 only teach mononuclear Ar groups. Ulery (U.S. Pat. No. 3,723,317) teaches a lubricant composition that can contain as an effective additive a polynuclear heptazine oligomer (column 5 lines 46-69), but the additive only contains two Ar groups, while the claimed compounds require at least three Ar groups. There is no teaching or suggestion by Ulery to make a larger heptazine oligomer, as the

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reference is drawn towards triazine additives, and the heptazine oligomer is only a byproduct of triazine condensation when the composition is used at high temperatures.

Claims 18 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Dexter (U.S. Pat. No. 3,156,690) teaches bis-triazines useful for stabilizing oils against degradation, and the bis-triazines can be linked by an  $-S_2-$  linkage, as discussed in paragraph 4 of the office action mailed 12/19/06. However, to arrive at this linkage from the disclosure of Dexter, one would have to choose both  $X_1$  and  $X_2$  to be  $-S-$ , A to be  $-(CH_2)_n-$  ( $X$ ) $_m-$   $(CH_2)_p-$ , and finally n, m, and p all to be 0. There is no teaching in Dexter to motivate these choices, which are one permutation out of approximately 3,500 possibilities. Nor is there any teaching that would lead one of ordinary skill to narrow the group of 3,500 down to a smaller size. Therefore, it would not of have been obvious to one of ordinary skill in the art to use Dexter to teach sulfur-linked triazines as lubricant additives.

### **Conclusion**

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is 571-272-2476. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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